

Owner's Manual

IP66-Rated Gigabit PoE Outdoor Surge Protector

Model: B110-SP-CAT-OD

Este manual esta disponible en español en la página de Tripp Lite: tripplite.com/support

Ce manuel est disponible en français sur le site Web de Tripp Lite : tripplite.com/support

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WARRANTY REGISTRATION

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Package Includes

- B110-SP-CAT-OD Outdoor Surge Protector
- 18 AWG Grounding Wire – 1 ft.
- Metric Cable Gland, 8.4 mm Diameter (x2)
- PCBA Mounting Screws (x2)
- (x4) Surface Screw Anchors
- (x4) Surface Mounting Screws
- Unit Cover Screws (x4)
- Owner's Manual

Product Features

- Protects valuable outdoor PoE equipment from power surges, lightning, ESD and cable discharge events in unforgiving environments
- Complies with 802.3af, 802.3at and 802.3bt IEEE Standards
- Support PoE devices up to 90W and Ethernet speeds up to 1 Gbps
- Meets the following IEC regulations:
 - IEC 61000-4-2 (ESD) +/- 15kV(Air), +/- 8kV(Contact)
 - IEC 61000-4-5 (Lightning) 10kA (8/20 μ s), 20kV (8/20 μ s)
- Supports both Mid- and End-Span PoE
- Passive by design—no external power required

Optional Accessories

- N224-Series Cat6 Plenum-Rated Solid-Core Bulk Cable
- T100-001-TST Wire Crimper with Built-In Cable Tester

Mounting Instructions

On the bottom of the enclosure, the distance from the center to center of each mounting hole are engraved (Figure 1). Securely mount the bottom portion of the enclosure to the desired outdoor location. Screw hole diameter supports mounting screw sizes up to M3.5.

Note: Mount the enclosure with the screw slit side in the bottom right corner, see Figure 2)

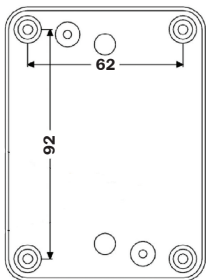


Figure 1

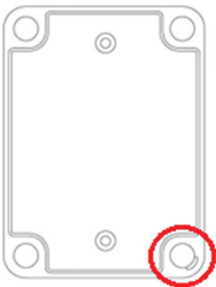


Figure 2

Metric Cable Gland Assembly



Installation

Protect outdoor edge network devices like PoE cameras or LAN access points from water, dust or electrical damage by installing the B110-SP-CAT-OD between the source and edge network equipment.

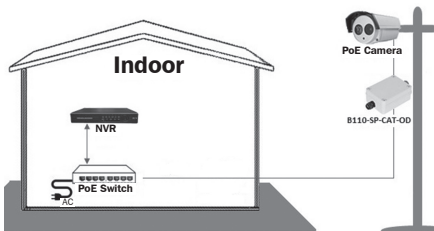
Note: Maximum cable distance between B110-SP-CAT-OD and source is 328 ft. (100 m); maximum cable distance between B110-SP-CAT-OD and equipment is 328 ft. (100 m). For best protection performance, the total cable distance in the installation should not exceed 328 ft. (100 m).

Note: The B110-SP-CAT-OD must be grounded to function properly.

Installation

Equipment (Edge) Protection Only

This installation protects only your edge equipment from surge, lightning or ESD damage. To protect both the source and edge equipment, refer to section **Source and Equipment (Edge) Protection**.



Note: Use standard size Cat5e, Cat6 or Cat6a cables that feature a wire gauge of 23/24 AWG. Slim category cables are not supported.

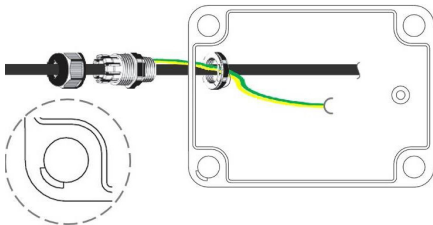
1. Remove both the cap **A** and end nut **E** from one of the metric cable glands (refer to section **Metric Cable Gland Assembly**). Slide the cap and remaining portion of the metric cable gland onto both the included grounding wire and bare-wire category cable coming from your source (ex: PoE switch) as shown:



Note: Use standard size Cat5e, Cat6 or Cat6a cabling that features a wire gauge of 23/24 AWG. Slim category cables are not supported.

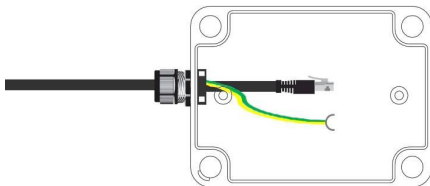
Installation

2. Insert both the grounding wire and the bare-wire end of the category cable in the enclosure, making sure it is inserted on the side with the slit.



3. Using a crimping tool (such as Tripp Lite's T100-001-TST, sold separately), crimp an RJ45 connector to the bare end of the category cable.

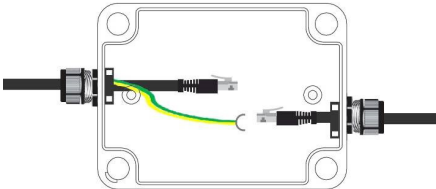
Screw the metric cable gland to the enclosure using the end nut **E** previously removed in Step 1. Then tighten the cap securely onto the metric cable gland.



Installation

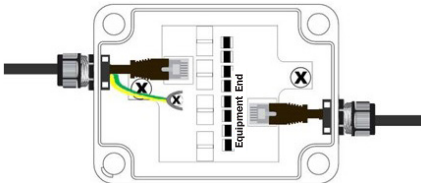
4. Repeat Steps 1-3 for the equipment (ex: PoE camera) side of the enclosure without the addition of a grounding wire.

Note: To achieve the best protection performance, the Cat5e/6/6a patch cable between the equipment end of the B110-SP-CAT-OD surge protector and the equipment to be protected must not exceed 300 ft.



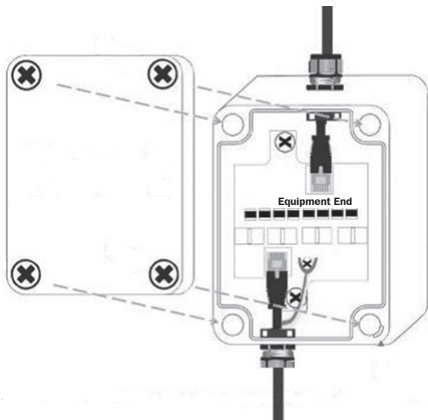
5. Once both bare wires are crimped, connect the newly crimped RJ45 cables to the PCBA, then secure the PCBA board to the enclosure using the included mounting screws. Lastly, attach the grounding wire to the available screw on the PCBA board.

Note: Ensure the cable end of the PCBA is facing the side with the slit and the equipment end facing the other. Make sure you connect your source to the cable end, and your PoE-compliant device to the equipment end.



Installation

6. Screw the front cover to the back portion of the enclosure using the included unit cover screws, making sure both the groove and the slit line up.



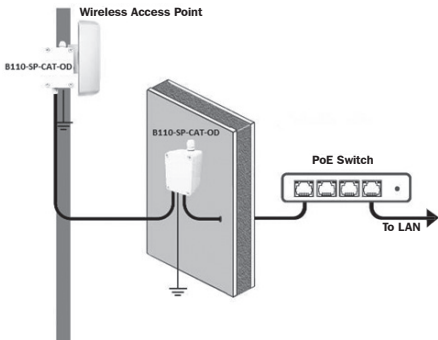
7. The connected PoE device is now protected.

Installation

Source and Equipment (Edge) Protection

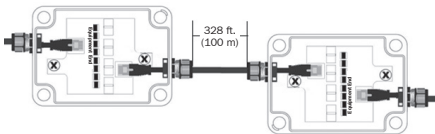
The previous installation only protects your edge equipment from surge, lightning or ESD damage. To protect both the source and edge equipment, install two B110-SP-CAT-OD units in your application. A B110-SP-POE can be installed instead of a second B110-SP-CAT-OD to protect the source if the second unit will be installed indoors.

Note: Use standard size Cat5e, Cat6 or Cat6a cables that feature a wire gauge of 23/24 AWG. Slim category cables are not supported. Maximum cable distance between two B110-SP-CAT-OD units is 328 ft. (100 m).



Installation

1. Install a second B110-SP-CAT-OD between the first B110-SP-CAT-OD unit and your source following **Equipment (Edge) Protection Only** installation Steps 1-3.
2. In order to protect both the source and edge equipment, the two B110-SP-CAT-OD units need to be wired cable end-to-cable end as shown below.



Specifications

Specification	B110-SP-CAT-0D
Input / Output Connectors	RJ45 Female
ESD Protection	15kV (Air), 8kV (Contact)
Lightning Protection	10kA (8/20 μ s) / 20kV (8/20 μ s)
Surge Reaction Speed	<1ns
Operating Temperature	-40 to 158 °F (-40 to 70 °C)
Storage Temperature	-40 to 194 °F (-40 to 90 °C)
Relative Humidity	0% to 95% RH, Non-Condensing
IP Rating	IP66 (Dust-Proof/ Water-Resistant)
Network Speed	10/100/1000 Mbps
Max Supported PoE Wattage	90W
IEEE Standards Supported	802.3af, 802.3at, 802.3bt
Span Support	Mid- & End-Span
Material	ABS
Dimensions [H x W x D]	3.2 x 2.8 x 6.5 in. (80 x 70.1 x 166 mm)
Weight	0.51 lb. (0.23 kg)

Warranty and Product Registration

2-Year Limited Warranty

Tripp Lite warrants its products to be free from defects in materials and workmanship for a period of two (2) years from the date of initial purchase. Tripp Lite's obligation under this warranty is limited to repairing or replacing (at its sole option) any such defective products. To obtain service under this warranty, you must obtain a Returned Material Authorization (RMA) number from Tripp Lite or an authorized Tripp Lite service center. Products must be returned to Tripp Lite or an authorized Tripp Lite service center with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. This warranty does not apply to equipment, which has been damaged by accident, negligence or misapplication or has been altered or modified in any way.

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Product Registration

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Use of this equipment in life support applications where failure of this equipment can reasonably be expected to cause the failure of the life support equipment or to significantly affect its safety or effectiveness is not recommended.

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